

Title (en)

Heat regenerative material

Title (de)

Regeneratives Wärmeaustauschmaterial

Title (fr)

Matériaux pour échange régénératif de chaleur

Publication

EP 0551983 B1 19970326 (EN)

Application

EP 93300063 A 19930106

Priority

- JP 137592 A 19920108
- JP 26186292 A 19920930

Abstract (en)

[origin: EP0551983A2] Disclosed is a regenerator loaded with a relatively cheap heat regenerative material (2) which exhibits excellent specific heat, heat transfer capability and recuperativeness under cryogenic temperatures lower than, for example, the liquid nitrogen temperature. The regenerator is filled with a heat regenerative material (2) comprising at least one R-M system compound, where R is at least one rare earth element selected from the group consisting of Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb and Lu, and M is at least one metal selected from the group consisting of Al, Ga, In and Tl. <IMAGE>

IPC 1-7

C09K 5/00; F25B 9/14

IPC 8 full level

F02G 1/044 (2006.01); **F25B 9/14** (2006.01); **F28D 17/00** (2006.01)

CPC (source: EP US)

F02G 1/0445 (2013.01 - EP US); **F25B 9/14** (2013.01 - EP US); **F28D 17/00** (2013.01 - EP US); **F02G 2250/18** (2013.01 - EP US);
F05C 2225/08 (2013.01 - EP US); **F25B 2309/003** (2013.01 - EP US); **F25B 2321/002** (2013.01 - EP US)

Cited by

EP0882938A4; EP1957891A4; EP2038591A4; EP0825394A4; DE10020488B4

Designated contracting state (EPC)

DE GB

DOCDB simple family (publication)

EP 0551983 A2 19930721; EP 0551983 A3 19940216; EP 0551983 B1 19970326; DE 69309116 D1 19970430; DE 69309116 T2 19970731;
US 5332029 A 19940726

DOCDB simple family (application)

EP 93300063 A 19930106; DE 69309116 T 19930106; US 99971592 A 19921231